

What is claimed is:

1. A knee bolster assembly for a vehicle comprising:
an air bag having an inflated condition and a deflated condition;
an air bag inflator in communication with said air bag for filling said air bag to said inflated condition;
a knee contact plate movable with said air bag, said knee contact plate having an actuated position with said air bag in said inflated condition and an unactuated position with said air bag in said deflated condition; and
a guide structure attached to said knee contact plate, said guide structure for directing said knee contact plate along a generally linear path from said unactuated position to said actuated position.
2. The knee bolster assembly of Claim 1 wherein said guide structure directs said knee contact plate to an anticipated location of a knee of a vehicle occupant.
3. The knee bolster assembly of Claim 1 wherein said guide structure comprises a first member and a second member, said first member extendable from said unactuated position to said actuated position along said generally linear path relative to said second member.
4. The knee bolster assembly of Claim 3 wherein said first member is disposed within said second member.
5. The knee bolster assembly of Claim 4 wherein said first member comprises a guide pin and said second member comprises a guide tube.
6. The knee bolster assembly of Claim 5 wherein said guide pin has a first tapered surface and said guide tube has a second tapered surface, said first tapered surface mating with said second tapered surface in said actuated position.

7. The knee bolster assembly of Claim 1 including an air bag housing for storing said air bag in said deflated position.

8. The knee bolster assembly of Claim 7 wherein said air bag has a rear area and a front area, said rear area disposed closer to an air bag housing than said front area in said inflated condition and wherein said knee contact plate is disposed at said front area.

9. The knee bolster assembly of Claim 1 including a tether attaching said air bag to said knee contact plate.

10. The knee bolster assembly of Claim 1 wherein said knee contact plate comprises a cushion.

11. The knee bolster assembly of Claim 1 wherein said guide structure is expandable and retractable between said actuated position and said unactuated position.

12. A knee bolster assembly for a vehicle comprising:
an air bag having an inflated condition and a deflated condition;
an air bag inflator in communication with said air bag for filling said air bag to said inflated condition;
an air bag housing for storing said air bag in said deflated condition;
a knee contact plate movable with said air bag, said knee contact plate having an actuated position with said air bag in said inflated condition and an unactuated position with said air bag in said deflated condition;
a guide structure attached to said knee contact plate, said guide structure for directing said knee contact plate between said unactuated position to said actuated position; and

wherein said air bag has a rear area and a front area, said rear area disposed closer to an air bag housing than said front area when in said inflated condition, said knee contact plate disposed at said front area.

13. The knee bolster assembly of Claim 12 wherein said guide structure directs said knee contact plate to an anticipated location of a knee of a vehicle occupant along a generally linear path.

14. The knee bolster assembly of Claim 12 wherein said guide structure comprises a first member and a second member, said first member extendable from said unactuated position to said actuated position along said generally linear path relative to said second member.

15. The knee bolster assembly of Claim 14 wherein said first member is disposed within said second member.

16. The knee bolster assembly of Claim 15 wherein said first member comprises a guide pin and said second member comprises a guide tube.

17. The knee bolster assembly of Claim 12 including a tether attaching said air bag to said knee contact plate.

18. The knee bolster assembly of Claim 12 wherein said knee contact plate comprises a cushion.

19. The knee bolster assembly of Claim 12 wherein said guide structure is expandable and retractable between said actuated position and said unactuated position.

20. A method of deploying a knee bolster assembly comprising the steps of:

a) inflating an air bag from a deflated condition to an inflated condition;

- b) communicating a movement of the air bag from the deflated condition to the inflated condition to a knee bolster;
- c) directing the knee bolster along a generally linear path to an anticipated location of a knee; and
- d) moving the knee bolster from a first position to a second position, the second position located closer to the anticipated location of the knee than the first position.